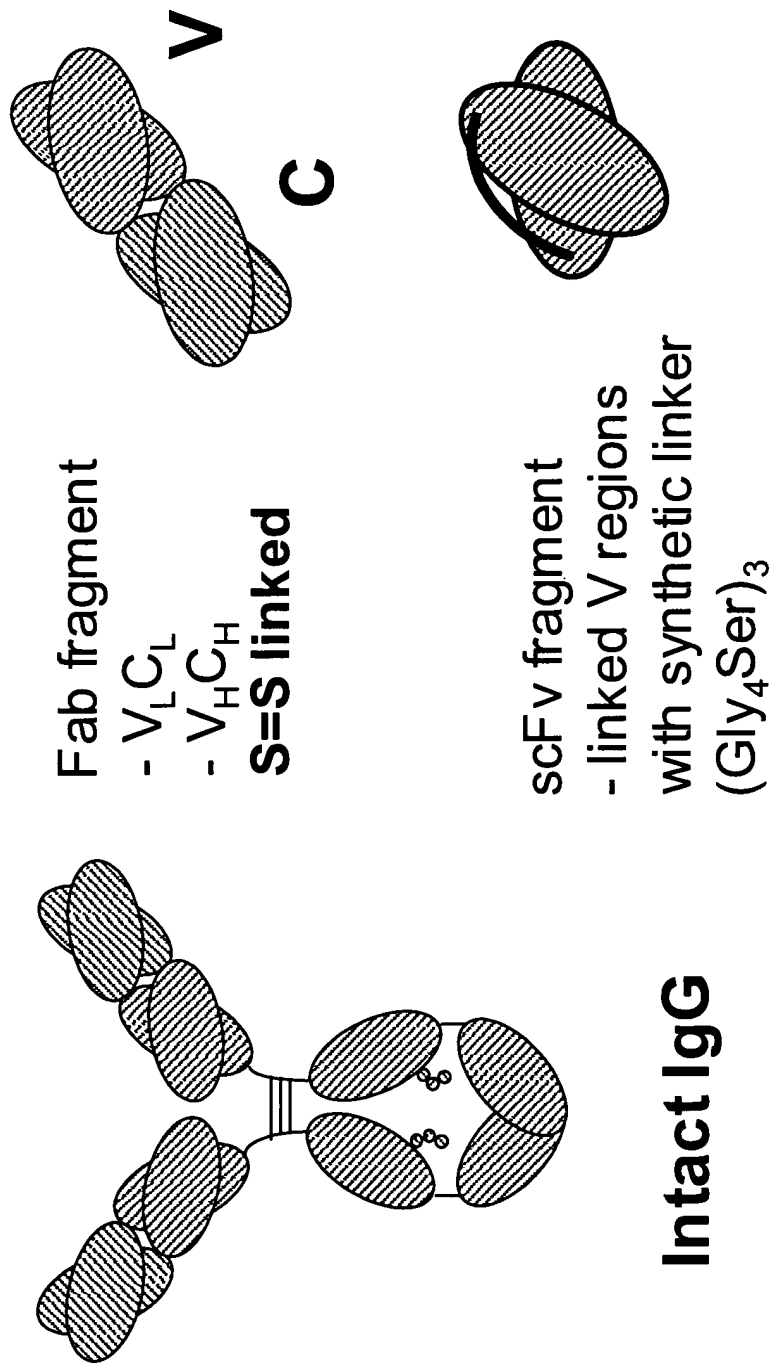




## IgG and binding Fragments



**FIG. 1**

# Recombinant Positive Control Reagent

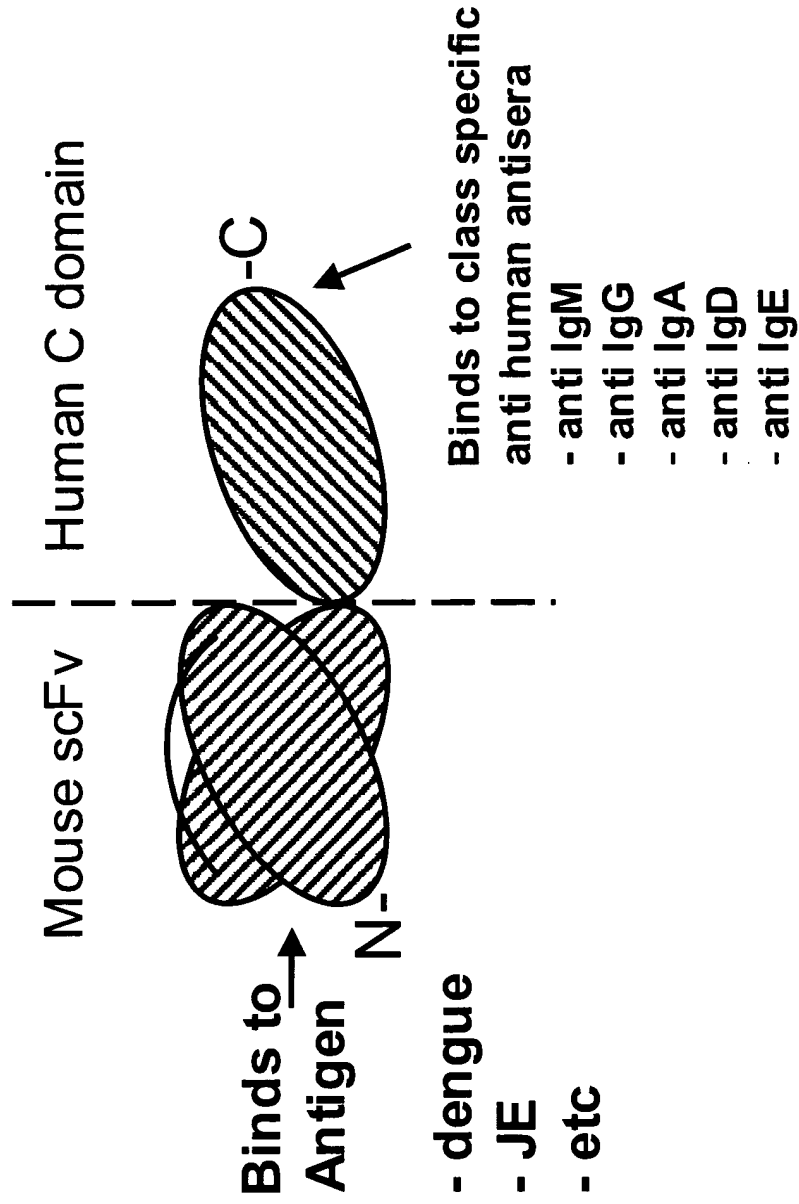
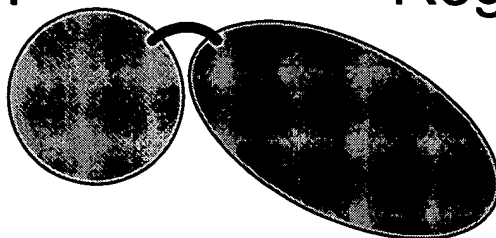


FIG. 2



**Region 1**

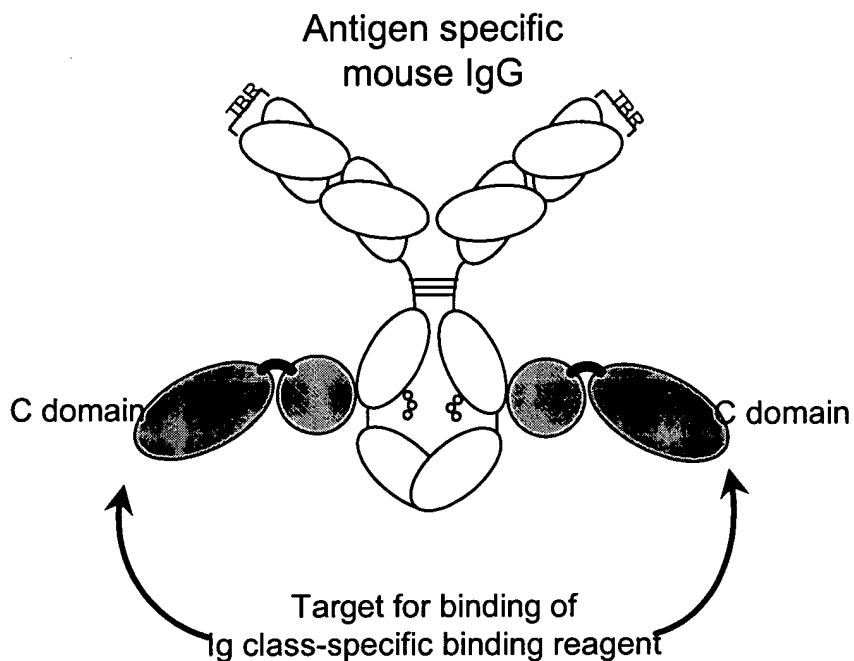
**Region 2**



**binds to  
Mouse IgG**

**Immunoglobulin C domain  
reactive to class specific  
anti immunoglobulin binding reagent**

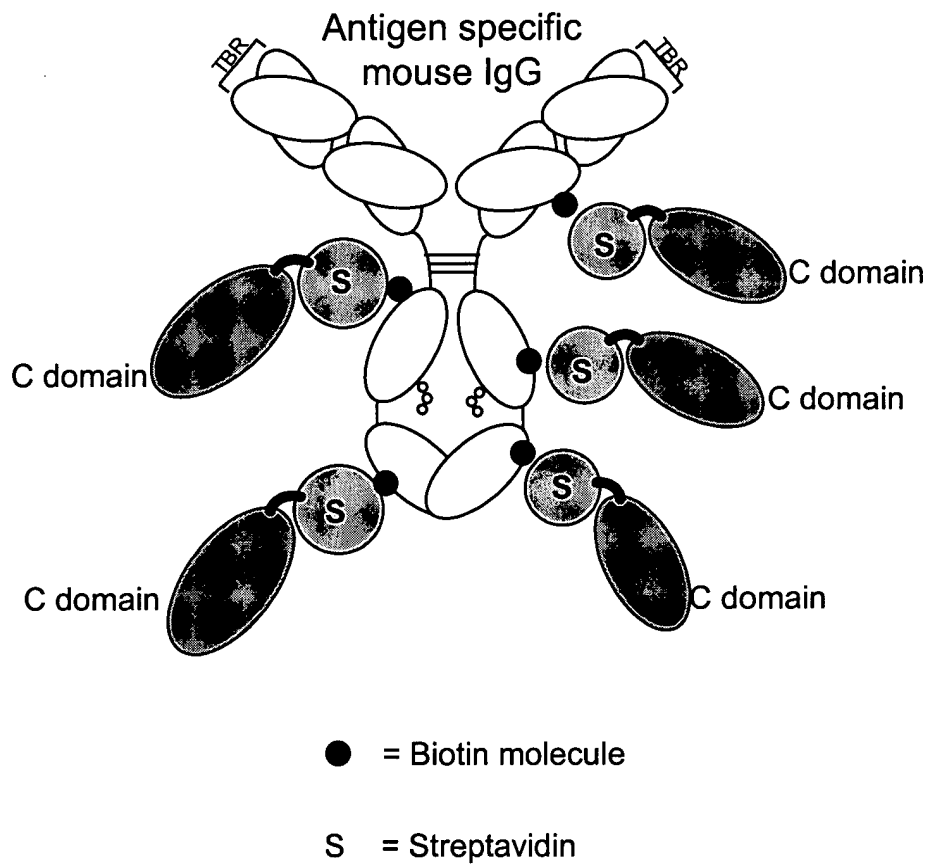
**Complex formed between bifunctional  
molecule and mouse IgG**



**FIG. 3**



**Complex formed between bifunctional  
molecule containing streptavidin  
and biotinylated mouse IgG**



**FIG. 4**

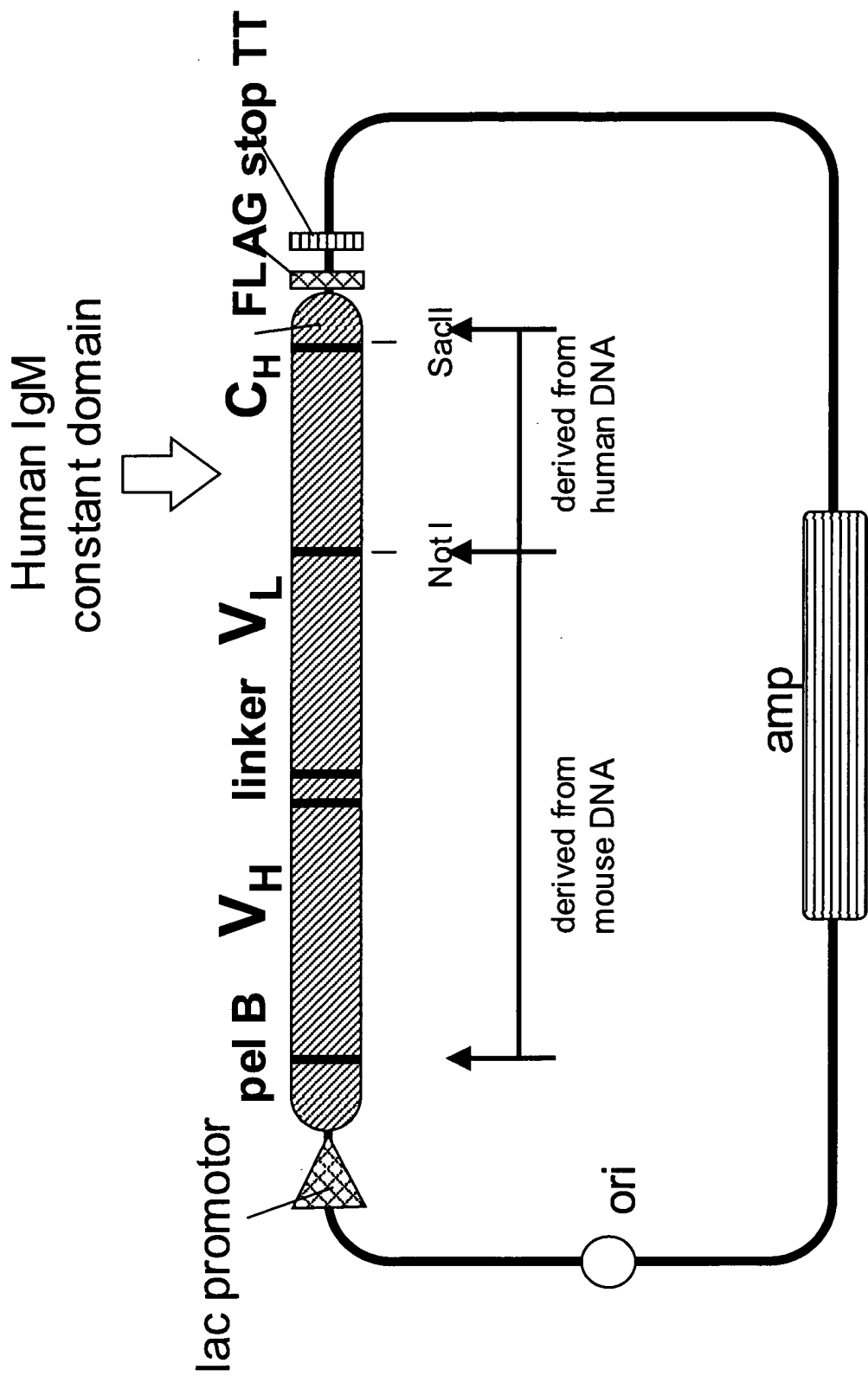
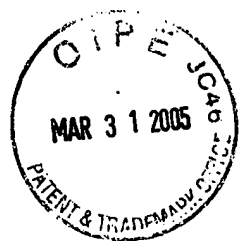
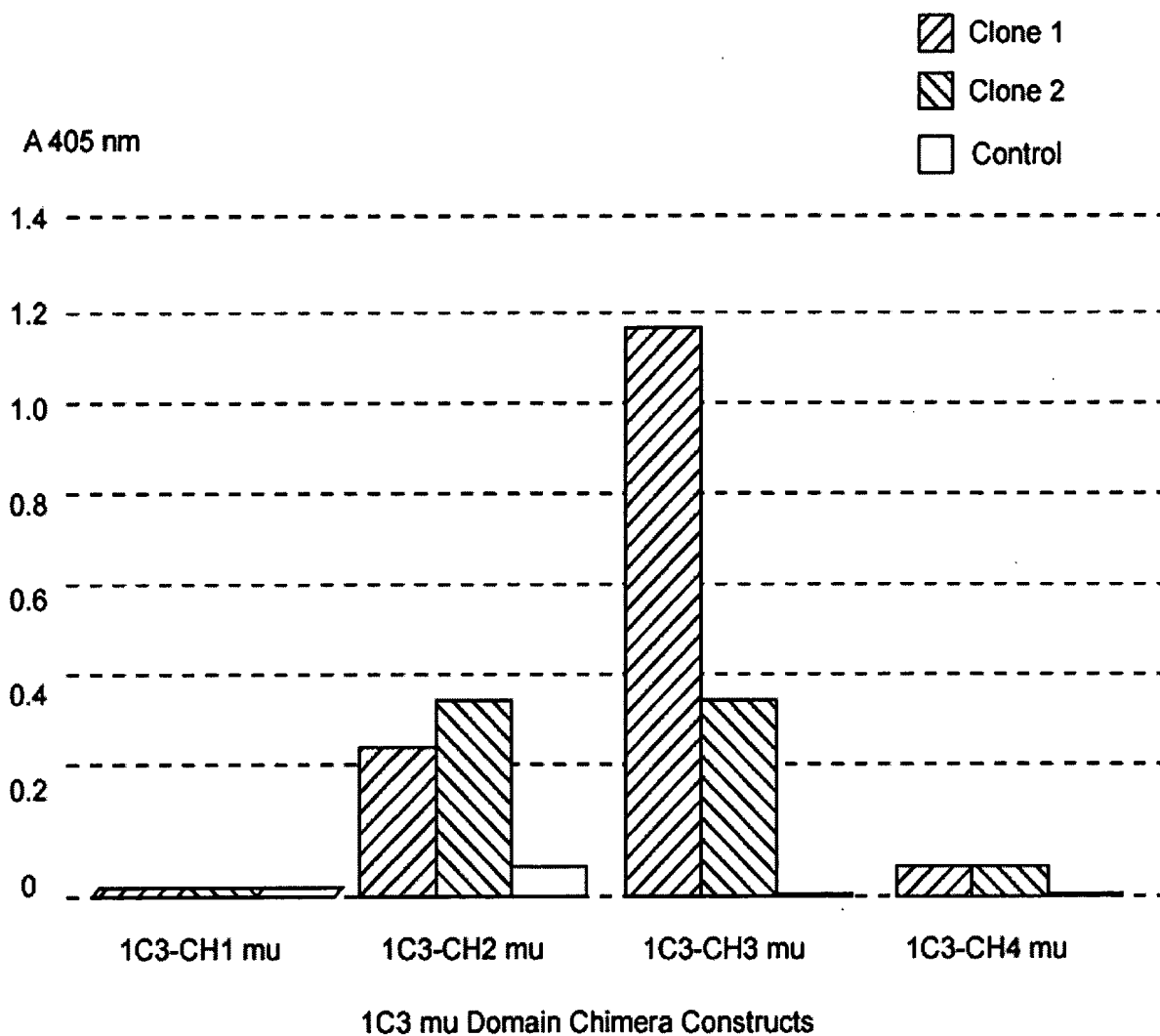


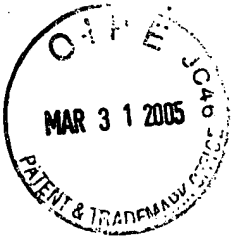
FIG. 5



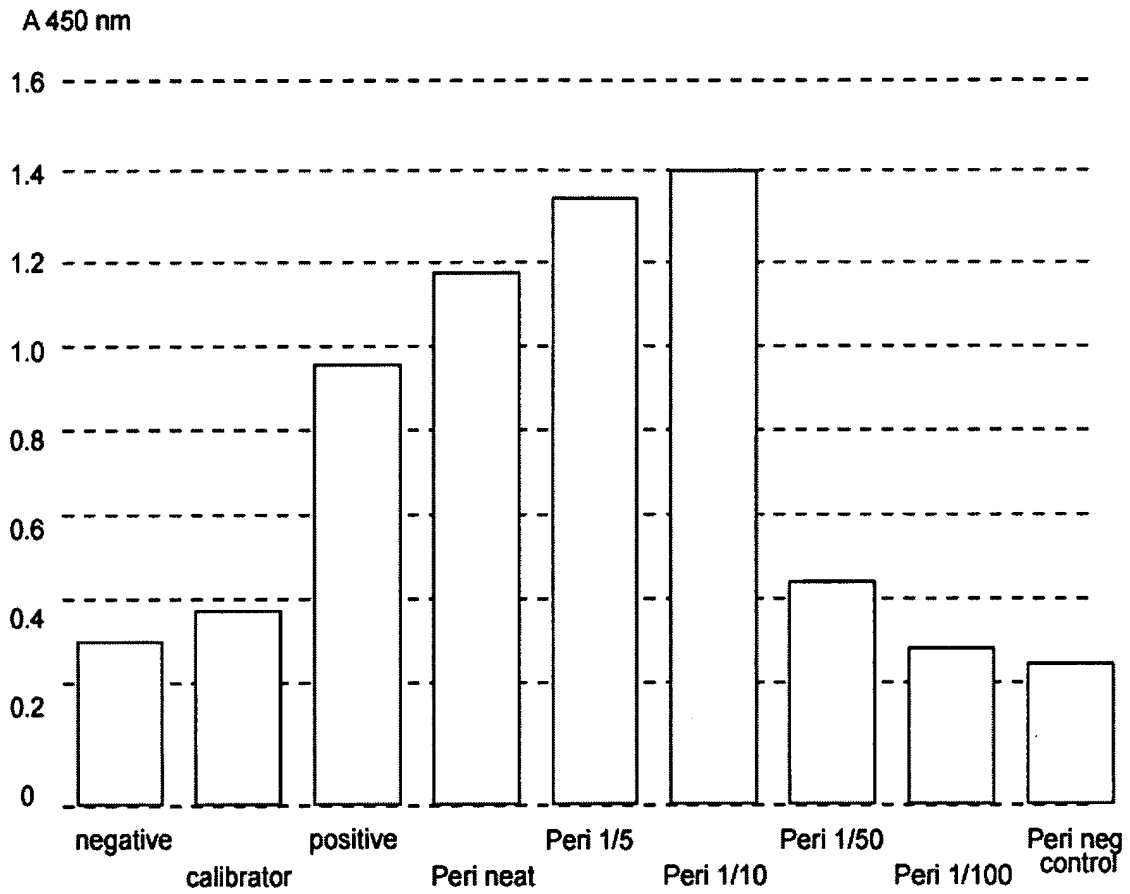
ELISA reactivity of 1C3  $\mu$  domain chimeras  
Glycophorin on Plate: Probed with sheep anti Human IgM HRP



**FIG. 6**



Dengue IgM Capture ELISA  
Reactivity of 13C11-CH3 $\mu$  protein from E coli TOPP6 periplasm



**FIG. 7**



```

      M   K   Y   L   L   P   T   A   A   A   G   L   L   L   L   A
2353  ATG AAA TAC CTA TTG CCT ACG GCA GCC GCT GGA TTG TTA TTA CTC GCG
      \-- Pel B-- -->
      A   Q   P   A   M   A   A   D   N   K   F   N   K   E   Q   Q
2401  GCC CAG CCG GCC ATG GCC GCG GAT AAC AAA TTC AAC AAA GAA CAA CAA
      --- Sfi 1   <N col >   < Start Fragment B
      N   A   F   Y   E   I   L   H   L   P   N   L   N   E   E   Q
2449  AAT GCT TTC TAT GAA ATC TTA CAT TTA CCT AAC TTA AAC GAA GAA CAA

      R   N   G   F   I   Q   S   L   K   D   D   P   S   Q   S   A
2497  CGC AAT GGT TTC ATC CAA AGC CTA AAA GAT GAC CCA AGC CAA AGC GCT

      N   L   L   A   E   A   K   K   L   N   D   A   Q   A   P   K
2545  AAC CTT TTA GCA GAA GCT AAA AAG CTA AAT GAT GCT CAA GCA CCA AAA
                        End Fragment B->
      S   D   P   A   A   A   D   Q   D   T   A   I   R   V   F   A
2593  AGT GAT CCC GCG GCC GCA GAT CAA GAC ACA GCC ATC CGG GTC TTC GCC
      < linker >   Not1 >   CH3 mu domain
      I   P   P   S   F   A   S   I   F   L   T   K   S   T   K   L
2641  ATC CCC CCA TCC TTT GCC AGC ATC TTC CTC ACC AAG TCC ACC AAG TTG

      T   C   L   V   T   D   L   T   T   Y   D   S   V   T   I   S
2689  ACC TGC CTG GTC ACA GAC CTG ACC ACC TAT GAC AGC GTG ACC ATC TCC

      W   T   R   Q   N   G   E   A   V   K   T   H   T   N   I   S
2737  TGG ACC CGC CAG AAT GGC GAA GCT GTG AAA ACC CAC ACC AAC ATC TCC

      E   S   H   P   N   A   T   F   S   A   V   G   E   A   S   I
2785  GAG AGC CAC CCC AAT GCC ACT TTC AGC GCC GTG GGT GAG GCC AGC ATC

      C   E   D   D   W   N   S   G   E   R   F   T   C   T   V   T
2833  TGC GAG GAT GAC TGG AAC TCC GGG GAG AGG TTC ACG TGC ACC GTG ACC

      H   T   D   L   P   S   P   L   K   Q   T   I   S   R   P   K
2881  CAC ACA GAC CTG CCC TCG CCA CTG AAG CAG ACC ATC TCC CGG CCC AAG

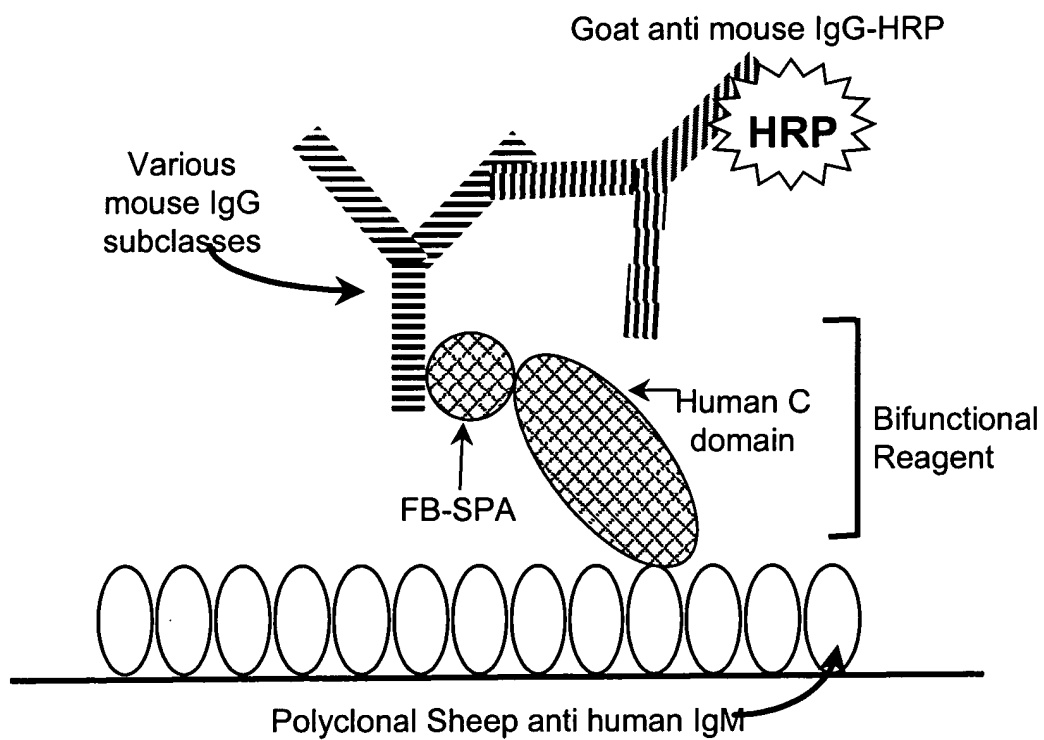
      G   A   A   D   Y   K   D   D   D   D   K   *
2929  GGc GCC GCG GAT TAT AAA GAT GAT GAT GAT AAA TAA GAA TTC AGC CCG
      Sac 2   ----- FLAG -----   Eco R1  <-----

2977  CCT AAT GAG CGG GCT TTT TTT TAA TTC ACT GGC CGT CGT TTT ACA ACG
      ----- TrpA terminator ----->

```

**FIG. 8**





**FIG. 9**



# Sequence of expression cassette Str-C<sub>H</sub>3<sub>μ</sub> in pGC vector

```

M   K   Y   L   L   P   T   A   A   A   G   L   L   L   L   A
2353 ATG AAA TAC CTA TTG CCT ACG GCA GCC GCT GGA TTG TTA TTA CTC GCG
\-- Pel B-- -->
A   Q   P   A   M   A   E   A   G   I   T   G   T   W   Y   N
2401 GCC CAG CCG GCC ATG GCC gag gcc ggc atc acc ggc acc tgg tac aac
--- Sfi 1   <N col >-- -corestreptavidin ----->
Q   L   G   S   T   F   I   V   T   A   G   A   D   G   A   L
2449 cag ctc ggc tcg acc ttc atc gtg acc gcg ggc gcc gac ggc gcc ctg

T   G   T   Y   E   S   A   V   G   N   A   E   S   R   Y   V
2497 acc gga acc tac gag tcg gcc gtc ggc aac gcc gag agc cgc tac gtc

L   T   G   R   Y   D   S   A   P   A   T   D   G   S   G   T
2545 ctg acc ggt cgt tac gac agc gcc ccg gcc acc gac ggc agc ggc acc

A   L   G   W   T   V   A   W   K   N   N   Y   R   N   A   H
2593 gcc ctc ggt tgg acg gtg gcc tgg aag aat aac tac cgc aac gcc cac

S   A   T   T   W   S   G   Q   Y   V   G   G   A   E   A   R
2641 tcc gcg acc acg tgg agc ggc cag tac gtc ggc ggc gcc gag gcg agg

I   N   T   Q   W   L   L   T   S   G   T   T   E   A   N   A
2689 atc aac acc cag tgg ctg ctg acc tcc ggc acc acc gag gcc aac gcc

W   K   S   T   L   V   G   H   D   T   F   T   K   V   K   P
2737 tgg aag tcc acg ctg gtc ggc cac gac acc ttc acc aag gtg aag ccg
| -end core
S   A   A   S   D   P   A   A   A   D   Q   D   T   A   I   R
2785 tcc gcc gct agc gat ccc gcg gcc gca gat caa gac aca gcc atc cgg
strep-| -   <l ink er> <-N ot1 > CH3 mu
V   F   A   I   P   P   S   F   A   S   I   F   L   T   K   S
2833 gtc ttc gcc atc ccc cca tcc ttt gcc agc atc ttc ctc acc aag tcc

T   K   L   T   C   L   V   T   D   L   T   T   Y   D   S   V
2881 acc aag ttg acc tgc ctg gtc aca gac ctg acc acc tat gac agc gtg
T   I   S   W   T   R   Q   N   G   E   A   V   K   T   H   T
2929 acc atc tcc tgg acc cgc cag aat ggc gaa gct gtg aaa acc cac acc

N   I   S   E   S   H   P   N   A   T   F   S   A   V   G   E
2977 aac atc tcc gag agc cac ccc aat gcc act ttc agc gcc gtg ggt gag

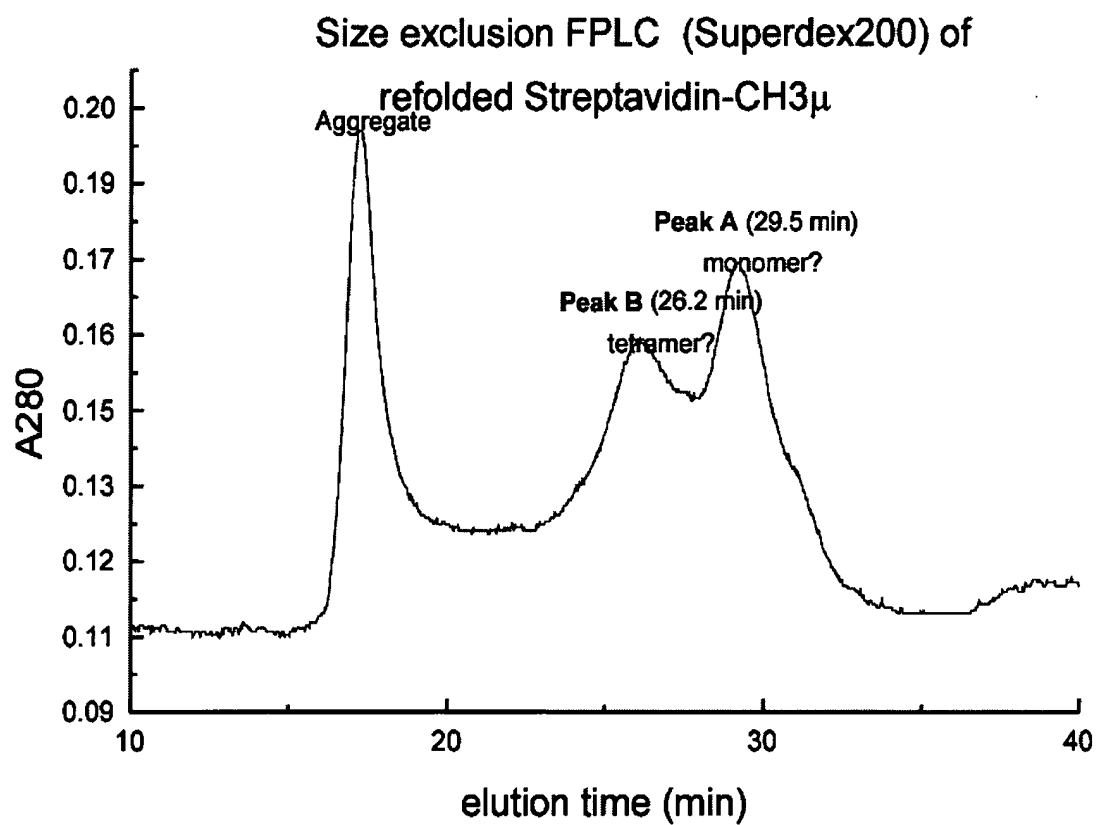
A   S   I   C   E   D   D   W   N   S   G   E   R   F   T   C
3025 gcc agc atc tgc gag gat gac tgg aac tcc ggg gag agg ttc acg tgc

T   V   T   H   T   D   L   P   S   P   L   K   Q   T   I   S
3073 acc gtg acc cac aca gac ctg ccc tcg cca ctg aag cag acc atc tcc

R   P   K   G   A   A   D   Y   K   D   D   D   D   K   *
3121 cgg ccc aag ggc gcc gcg gat tat aaa gat gat gat gat aaa taa GAA
Sac 2   --- --- --- -FL AG   --- --- ---   Eco

```

FIG. 10



**FIG. 11**